

Application No. 09/674,971
Amendment dated May 16, 2005
Reply to Office Action of December 15, 2004

REMARKS

Applicant amended claims 29 and 39, and added new claims 50-53 to further define Applicant's invention. The amendment to claims 29 and 39 is supported at least by Figs. 6C and 7A. New claims 50 and 52 are supported at least by the Specification on page 15, lines 5-10 and Figs. 6C and 7A. New claims 51 and 53 are supported at least by Figs. 6C and 7A. New claims 50-53 read on Species I and Species A as defined by the Restriction Requirement dated August 12, 2004.

In the Office Action, the Examiner rejected claims 29-49 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,485,517 (the "517 patent"); rejected claims 29-38 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of U.S. Patent No. 6,241,770 (the "770 patent"); provisionally rejected claims 29-38 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of co-pending Application No. 09/792,679 (the "679 application"); and provisionally rejected claims 29-49 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of co-pending Application No. 10/246,931 (the "931 application"). Applicant respectfully traverses the Examiner's rejections and provisional rejections.

Independent claim 29 recites a method of inserting an artificial implant. Independent claim 39 recites a method of inserting a pair of artificial implants. The claims of the '517 and '770 patents, and the '679 and '931 applications are each drawn to implants or pairs of implants with openings for permitting bone growth between adjacent vertebral bodies. In the Restriction Requirement dated August 12, 2004, the Examiner required election between Group I drawn to a spinal fusion Implant and Group II drawn to a method for inserting an implant into a disc space. The Examiner supported the restriction on the basis that inventions were patentably distinct because "the process as claimed can be used with a materially different product such as an implant not having any openings." (Restriction Requirement, paragraph bridging pages 3-4). Applicant respectfully submits that the claims of the present invention are patentably distinct from those of the '517 and '770 patents, and the '679 and '931

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applications for at least the same reason as that used by the Examiner in the Restriction Requirement, i.e., that the methods of the presently claimed invention may be used with a materially different product such as an implant not having any openings. Applicant notes that this rationale was also applied by the Examiner in the Restriction Requirement dated October 24, 2003 in the '931 application, and in the Restriction Requirement dated December 4, 2001 in the '517 patent. Applicant submits that the Examiner's rejections and provisional rejections under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the claims of the '517 and '770 patents, and the '679 and '931 applications have been overcome.

The Examiner rejected claims 29-36 and 39-47 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,192,327 to Brantigan ("Brantigan"). Independent claims 29 and 39, as now amended, each recite the step of "forming an opening across a height of the disc space and into a portion of each of the adjacent vertebral bodies, the opening being at least in part curved across the height of the disc space."

Brantigan teaches a plurality of stackable implants 21 having non-arcuate top and bottom faces 21e with ridges. (Brantigan, col. 4, lines 57-67; Figs. 2 and 5). According to Brantigan, these implants "are intended to bottom out on adjacent vertebral end faces, which preferably have been prepared by flattening with a burr drill." (Brantigan, col. 2, lines 59-61). Brantigan does not teach or suggest forming an opening that is at least in part curved across the height of the disc space as recited in claims 29 and 39. Accordingly, Applicant submits that the rejection of claims 29-36 and 39-47 under 35 U.S.C. § 102(b) as being anticipated by Brantigan has been overcome.

The Examiner rejected claims 29-49 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,033,438 to Bianchi et al. ("Bianchi"). Independent claim 29 recites the step of "aligning the trailing end of the implant so that a majority of the trailing end of the implant is aligned with the anatomical curvature of the adjacent vertebral bodies and does not substantially protrude from the spine." Independent claim 39 recites the step of "aligning the trailing end of each implant so that a majority

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of the trailing end of each implant is aligned with the anatomical curvature of the adjacent vertebral bodies and does not substantially protrude from the spine."

Bianchi teaches a spacer 500 in the form of a bone dowel having a tool engaging end 501 with "a generally flat surface to accept the instrument for insertion of the dowel in the recipient [space]." (Bianchi, col. 7, lines 22-25; Figs. 4, 8, and 9). Very little, if any, of the trailing end of the Bianchi spacer is "aligned with the anatomical curvature of the adjacent vertebral bodies" as recited in independent claims 29 and 39. (See, e.g., Bianchi, Figs. 8 and 9). Accordingly, Applicant submits that the rejection of claims 29-49 under 35 U.S.C. § 102(e) as being anticipated by Bianchi has been overcome.

Applicant submits that independent claims 29 and 39 are patentable and that dependent claims 30-38 and 40-53, dependent from one of independent claims 29 or 39, or claims dependent therefrom, are patentable at least due to their dependency from an allowable independent claim.

In view of the foregoing remarks, it is respectfully submitted that the claims, as amended, are patentable. Therefore, it is requested that the Examiner reconsider the outstanding rejections in view of the preceding comments. Issuance of a timely Notice of Allowance of the claims is earnestly solicited.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this reply, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 50-1066.

Respectfully submitted,

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Dated: May 16, 2005

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